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CR Console

Retake Analysis
OPERATION MANUAL

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FUJI PHOTO FILM CO., LTD.

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INTRODUCTION

This Operation Manual describes functions and operation procedures of the Retake Analysis Software that is optionally available on the CR Console. For other functions and operation procedures, see the "CR Console OPERATION MANUAL", "CR Console OPERATION MANUAL - THE USER UTILITY OPERATIONS" and "Operation Manuals" of other optional software packages.

The Retake Analysis Software provides optional functions to be used on the CR Console. To use this software, the optional software must be installed and necessary settings performed accordingly beforehand by a FujiFilm-designated dealer.

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OVERVIEW

The Retake Analysis Software is offered to provide “Retake Analysis”, an optional function of the CR Console User Utility. You can launch this software from “Retake Analysis” of User Utility by logging onto the CR Console as an Administrator-authorized user.

Retake Analysis enables acquisition of mis-exposure image information for a certain period so that it is displayed properly in a list form. Mis-exposure image information thus acquired can be listed for all technologists or individually for each technologist. It is also possible for you to display images included in such mis-exposure information selected from the list.

Furthermore, you can use the Retake Analysis function to set up a time period for which you are acquiring mis-exposure image information, information to be acquired, as well as information used for output of such mis-exposure image information to files.

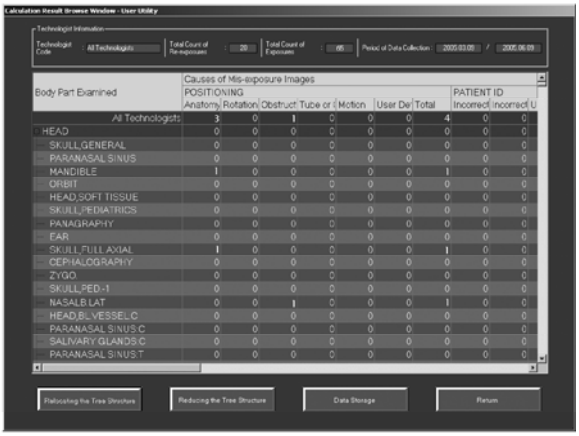
Mis-exposure image information acquired by means of the Retake Analysis function and then displayed in a list form can be calculated individually for each exposure region. Information thus calculated will be listed for each exposure region.

It is also possible to store mis-exposure image information, acquired by means of the Retake Analysis function and then displayed in a list form, as well as the calculated result, can be stored a in a “.csv” format file. Such file then can be saved at any location specified on the Setup Window - User Utility.

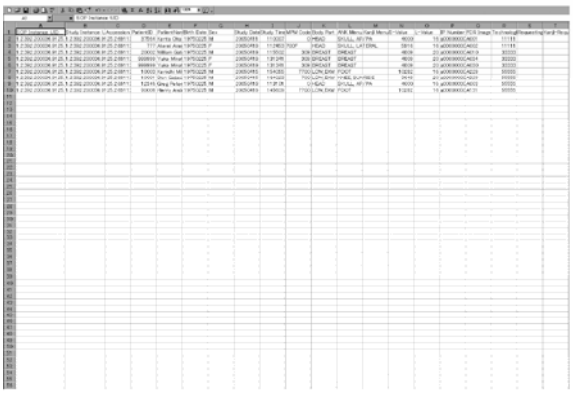
Mis-exposure Image Browse Window
(mis-exposure image information items are listed)

Calculation

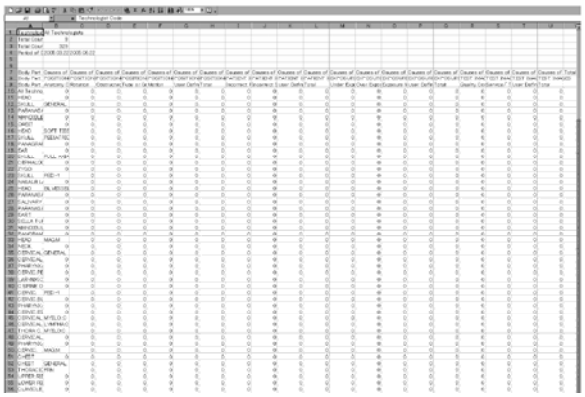
Calculation Result Browse Window
(calculation result of mis-exposure image information is listed)



Output onto a file



Output onto a file



OPERATION PROCEDURES

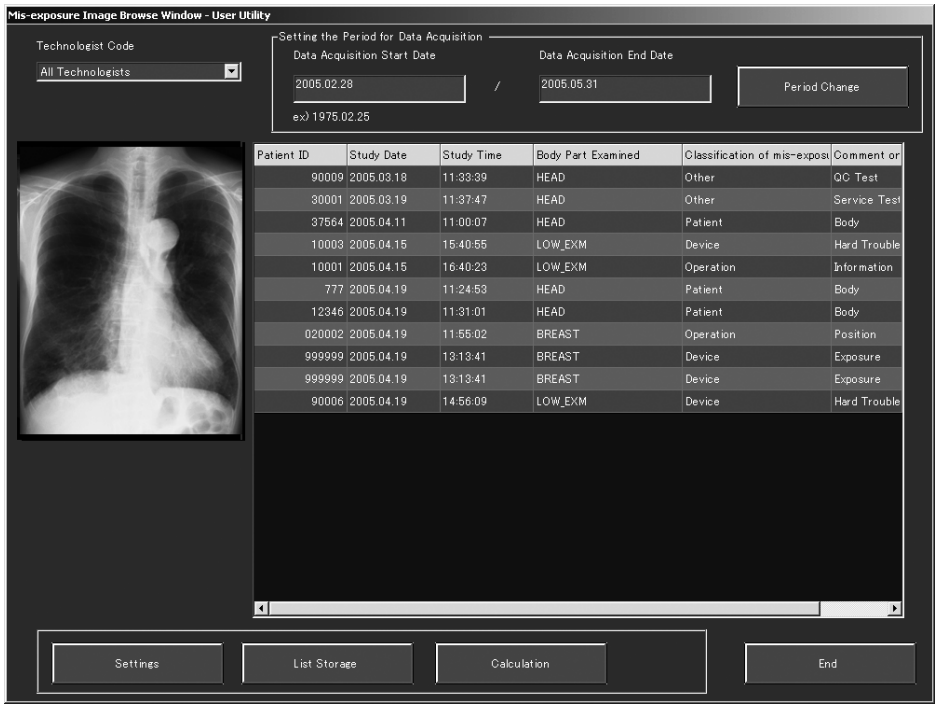
Described herein are procedures used to acquiring mis-exposure image information by means of the Retake Analysis Software and calculating results, and saving all those results onto files.

■ Starting and ending Retake Analysis

(1) Starting Retake Analysis from Main Menu - User Utility

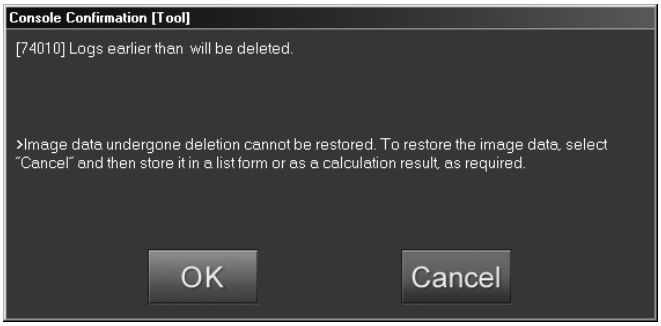
Launch User Utility and then select “Retake Analysis”.

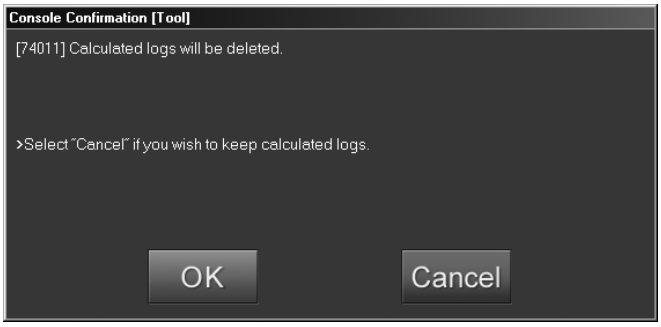
The Mis-exposure Image Browse Window opens.
On this window, you can display mis-exposure image information in a list form for all technologists or individually for each technologist. You can also change a period for which you are acquiring such information. Moreover, it is possible for you to verify mis-exposure images selected on the list.


Mis-exposure Image Browse Window - User Utility
Technologist Code
All Technologists
Setting the Period for Data Acquisition
Data Acquisition Start Date
Data Acquisition End Date
2005.02.28
/
2005.05.31
Period Change
ex) 1975.02.25
Patient ID Study Date Study Time Body Part Examined Classification of mis-exposu Comment or
90009 2005.03.18 11:33:39 HEAD Other QC Test
30001 2005.03.19 11:37:47 HEAD Other Service Test
37564 2005.04.11 11:00:07 HEAD Patient Body
10003 2005.04.15 15:40:55 LOW_EXM Device Hard Trouble
10001 2005.04.15 16:40:23 LOW_EXM Operation Information
777 2005.04.19 11:24:53 HEAD Patient Body
12346 2005.04.19 11:31:01 HEAD Patient Body
020002 2005.04.19 11:55:02 BREAST Operation Position
999999 2005.04.19 13:13:41 BREAST Device Exposure
999999 2005.04.19 13:13:41 BREAST Device Exposure
90006 2005.04.19 14:56:09 LOW_EXM Device Hard Trouble
Settings
List Storage
Calculation
End

(2) Ending Retake Analysis

Select “End” on the Mis-exposure Image Browse Window.
When mis-exposure image information is calculated and then the Retake Analysis ended, a message like that shown below appears.


Console Confirmation [Tool]
[74010] Logs earlier than will be deleted.
>Image data undergone deletion cannot be restored. To restore the image data, select ˝Cancel˝ and then store it in a list form or as a calculation result, as required.
OK
Cancel


Console Confirmation [Tool]
[74011] Calculated logs will be deleted.
>Select ˝Cancel˝ if you wish to keep calculated logs.
OK
Cancel

Selecting “OK” will delete mis-exposure image information to exclude it from the target for calculation. If “Cancel” is selected, mis-exposure image information is not deleted, and, consequently, it will not be excluded from the target for calculation. Note, however, that mis-exposure image information that has expired will be deleted.

Ever if an attempt is made to shut down the Retake Analysis without calculating mis-exposure image information, the “Calculated logs will be deleted.” message appears.

In such a case, select “Cancel” and store the list of obtained mis-exposure image information, as well as the list of the calculation result, and shut down the software program.
Close then the Mis-exposure Image Browse Window to end the Retake Analysis program.

■ Operating the list of mis-exposure image information

On the Mis-exposure Image Browse Window, it is possible for you to display such information in a list form for all technologists or individually for each technologist. It is also possible for you to display mis-exposure images selected from the list.
Moreover, you can also specify a certain period to display mis-exposure image information that corresponds.

(1) Sorting mis-exposure image information list items

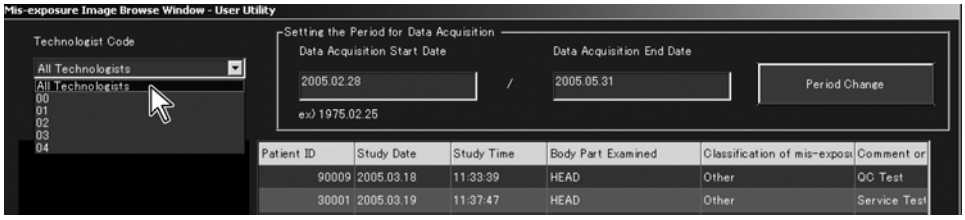
To select mis-exposure image information displayed on the Mis-exposure Image Browse Window, select a name of each information item.
With a selected information item using as a key element, you can sort the mis-exposure image information items either in ascending or descending order.
For example, if you wish to sort the listed information items according to order of study start dates, they will be sorted in ascending order and descending order alternately every time when "Study Date" is selected.

(2) Listing mis-exposure image information for all technologists or individually for each technologist

From the Technologist Code (or Technologist Name) pull-down menu, select technologist(s) whose mis-exposure image information you wish to list.
If you select "All Technologists", mis-exposure image information will be displayed for all technologists.

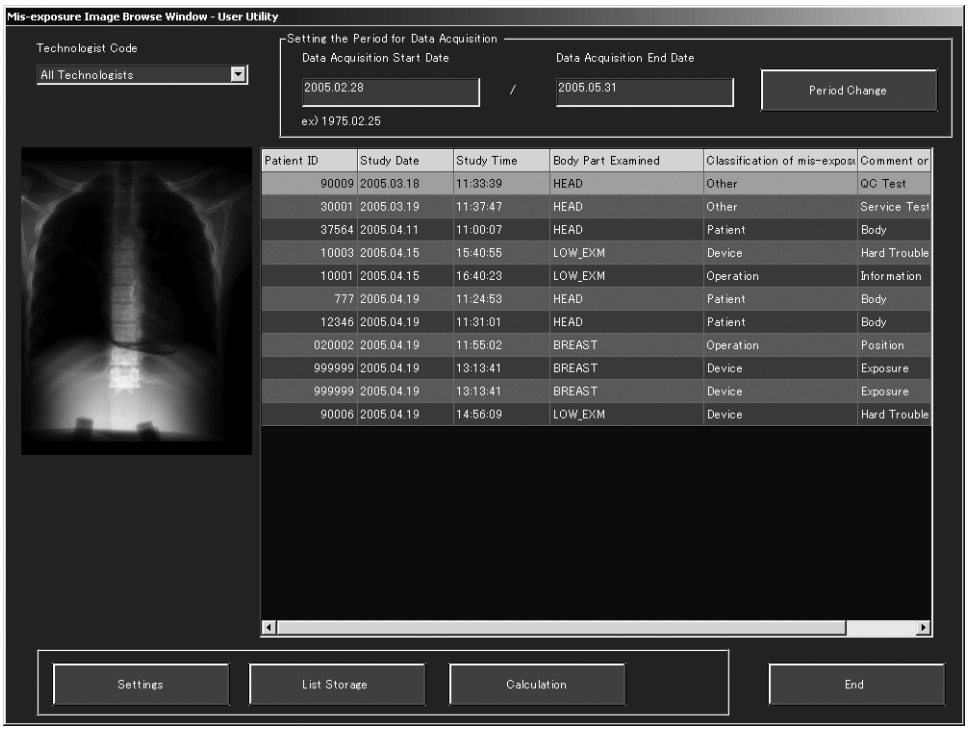
NOTE

- Technologist information is displayed according to the Technologist Code or Technologist Name, depending on what is determined on the window.



(3) Changing the period for which mis-exposure image information is to be acquired

Taking the date when the Retake Analysis program was performed as the Data Acquisition End Date, a period determined on the setup window will be displayed so that images for such period are acquired accordingly. The mis-exposure image information list shows items for the period displayed here.
If you change the displayed Data Acquisition Start Date and/or the Data Acquisition End Date, mis-exposure image information can be listed for the pre-determined period.
Change the Data Acquisition Start Date and/or the Data Acquisition End Date to specify a new period you wish.
Mis-exposure image information for a period thus changed will be displayed in a list form.



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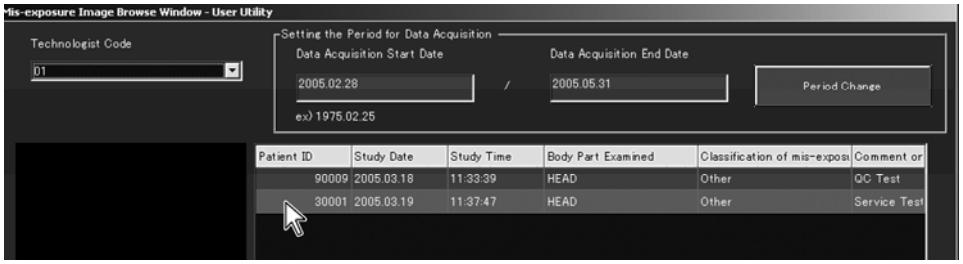
(4) Checking images selected from the mis-exposure image information list

From the mis-exposure image information list, select an item whose image you wish to check. The image thus selected will be displayed in the image display area to the left of the list.



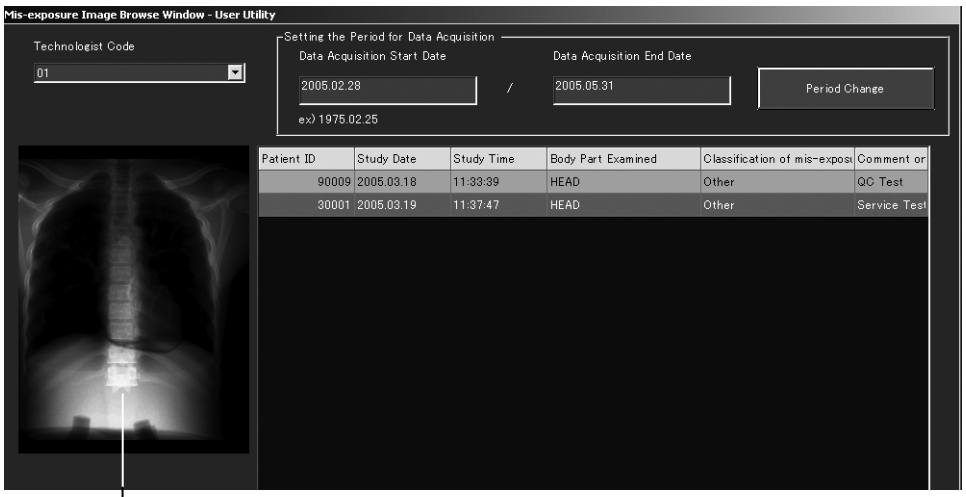
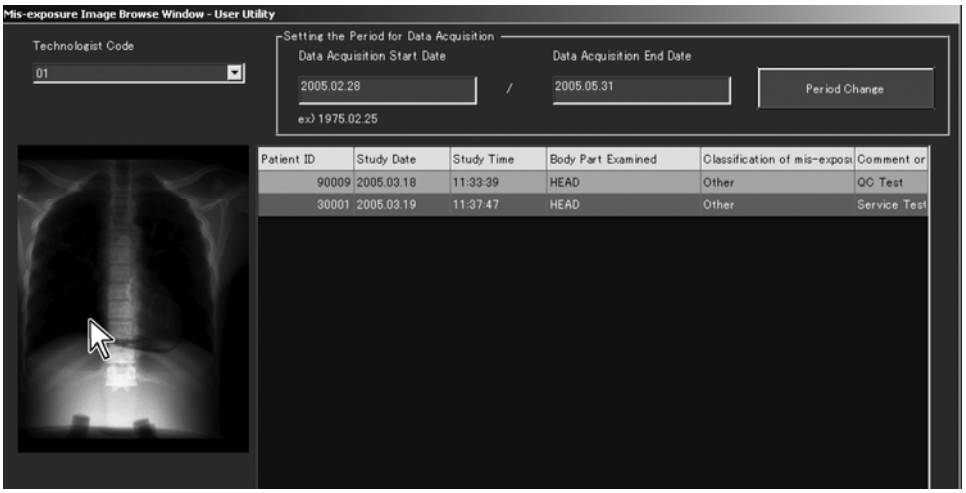


Image display area

(5) Displaying magnified or reduced images

To check an image displayed in the image display area, magnify or reduce it by opening the Mis-exposure Image Browse Window.
Select an image displayed in the image display area.



The Mis-exposure Image Browse Window will then open to display the selected image.

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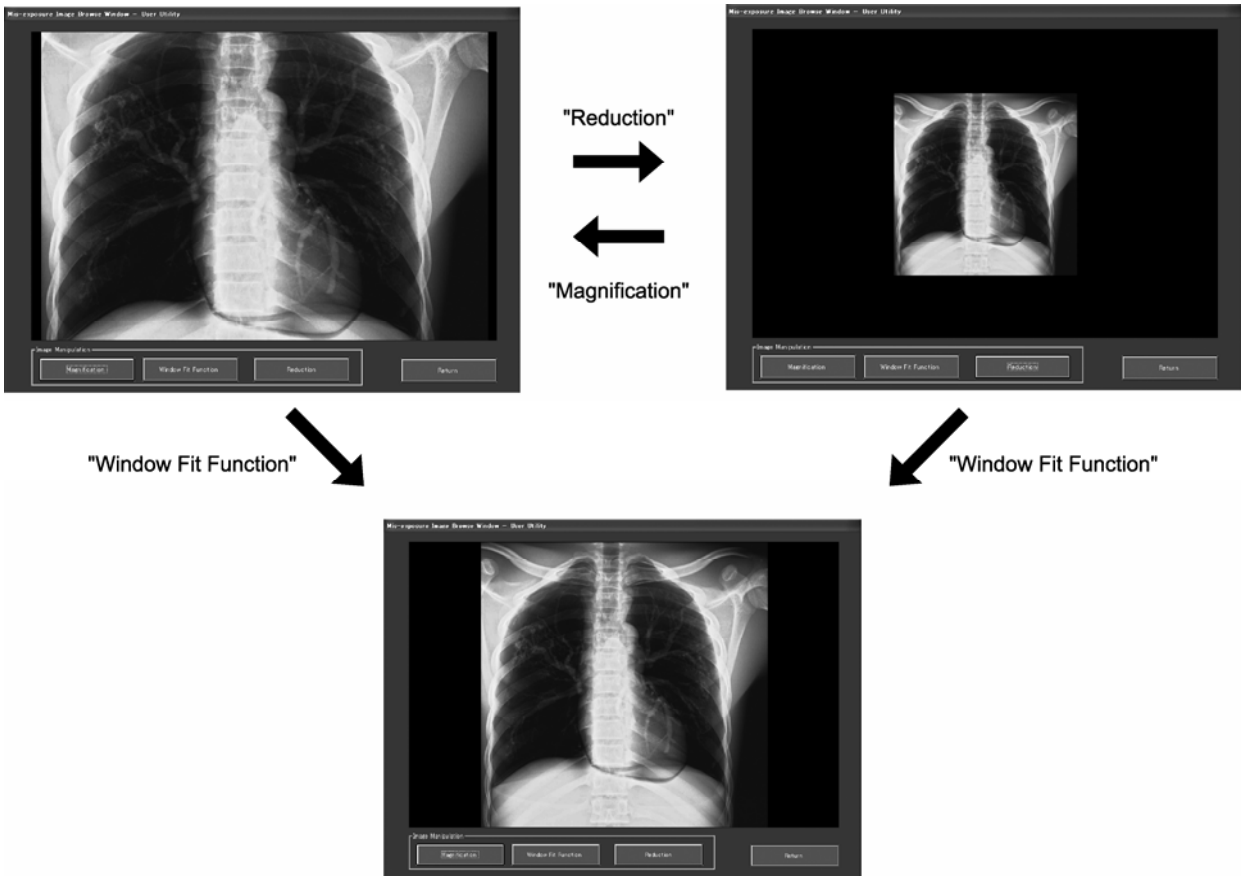
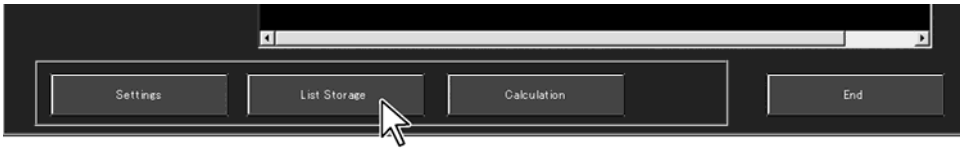
The target image is magnified and then displayed every time “Magnification” is selected.
The target image is reduced and then displayed every time “Reduction” is selected.
If you select “Window Fit Function”, the magnified or reduced image is displayed in a size fitted properly to the image display area.
If you select “Return”, the display shuts down returning then to the Mis-exposure Image Browse Window.

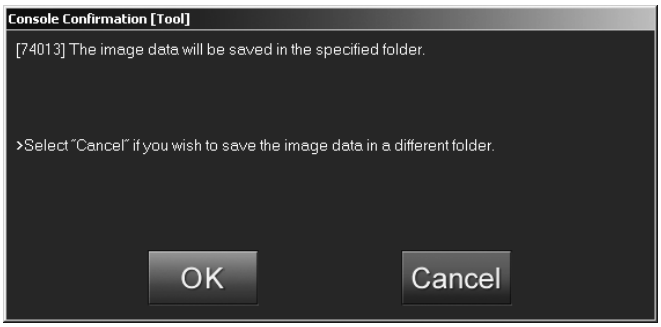


(6) Storing mis-exposure image information

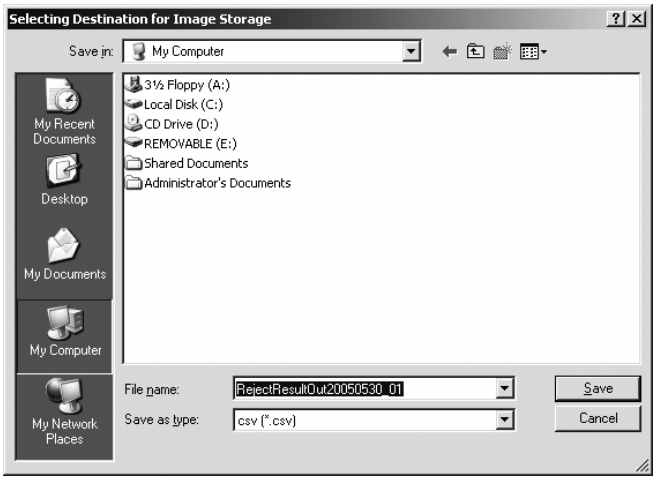
You can store mis-exposure image information, acquired using the Retake Analysis function and listed the on the window, in a ".csv" format file. Such file can be stored in a location specified on the Setup Window - User Utility.
Select "List Storage".



A message appears prompting you to confirm the destination for data storage.


Console Confirmation [Tool]
[74013] The image data will be saved in the specified folder.
>Select "Cancel" if you wish to save the image data in a different folder.
OK
Cancel

If you select "OK", mis-exposure image information will be stored in the destination for image data storage specified above.
If you select "Cancel", a window opens for you to specify a destination for image data storage.



Specify a destination for image data storage so that mis-exposure image information is stored appropriately.

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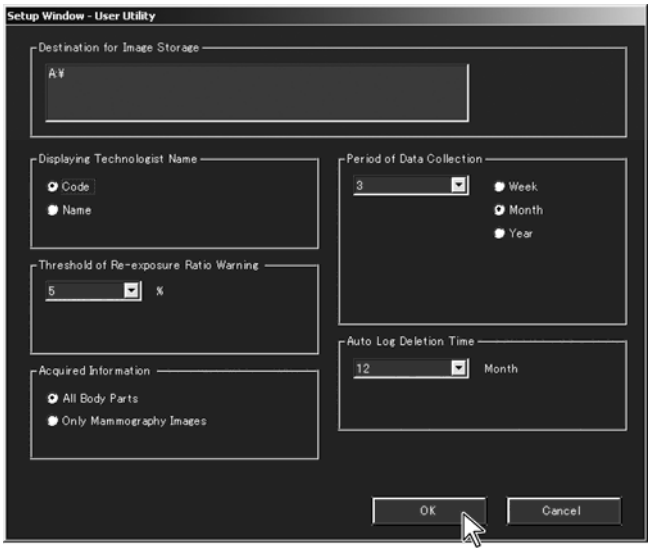
■ Settings for acquisition and storage of mis-exposure image information

(1) Displaying “Settings” on the Mis-exposure Image Browse Window

Select “Settings” on the Mis-exposure Image Browse Window.

The Setup Window - User Utility opens.
On this window, you can change settings related to data collection, or you can change how to display the list window or the destination for storage of mis-exposure image information.



Destination for Image Storage :

Specifies a location where mis-exposure image information, displayed on the Mis-exposure Image Browse Window, is to be stored.

Displaying Technologist Name :

Selects technologist information whether it is displayed using the technologist code or technologist name.

Threshold of Re-exposure Ratio Warning :

When mis-exposure image information is calculated, selects threshold value of re-exposure ratio to be displayed being emphasized as a warning given on the mis-exposure image information calculation window. Regardless of causes or body parts of re-exposures, a value resultant of calculation is displayed emphasized, when the re-exposure ratio exceeds the threshold value (%) determined here. You can select a threshold value in an increment of 1% between 1% and 10%.

Acquired Information :

Selects whether to acquire mis-exposure image information for all body parts or only mammography mis-exposure image information.

Period of Data Collection :

Specifies from among the following a period for which the mis-exposure image information is to be acquired.

When specifying a period on a weekly basis: 1 to 13 (weeks)
When specifying a period on a monthly basis: 1 to 12 (months)
When specifying a period on a yearly basis: 1 to 3 (years)

Auto Log Deletion Time :

Specifies a period for which an already-acquired mis-exposure image information is to be deleted on a monthly basis from 1 to 36. Mis-exposure image information for a period earlier than that specified here will be deleted at the end of Retake Analysis.

(2) Having setup data related to acquisition and storage of mis-exposure image information be reflected accordingly

If you select “OK”, setup data will be reflected on the result accordingly, returning then to the Mis-exposure Image Browse Window.
If you select “Cancel”, the program returns to the Mis-exposure Image Browse Window, without reflecting setup data determined on the Setup Window - User Utility.

■ Listing calculation result of mis-exposure image information

(1) Calculating mis-exposure image information from the Mis-exposure Image Browse Window and then displaying the calculation result in a list form then displaying the calculation result in a list form

Select “Calculation” on the Mis-exposure Image Browse Window.

The calculation result of mis-exposure image information, displayed on the Mis-exposure Image Browse Window, will be displayed on the Calculation Result Browse Window.

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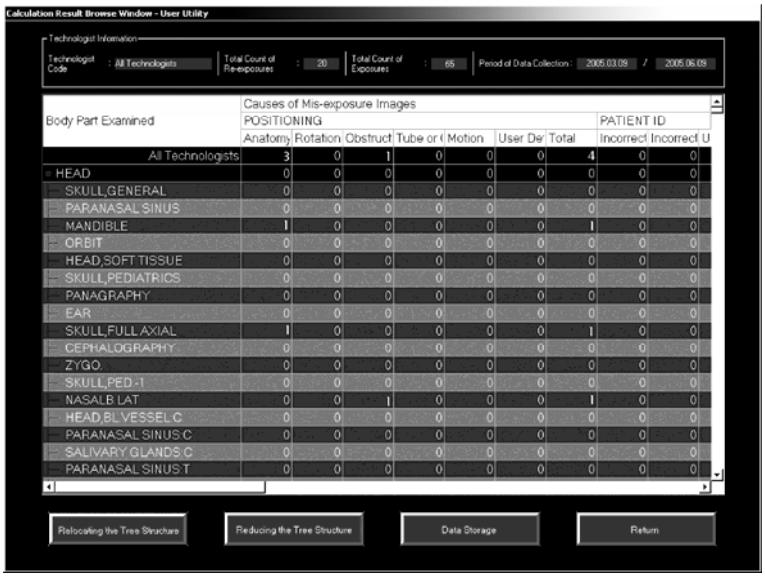


Technologist information, causes of mis-exposure images for each body part and the calculation result will be displayed on the Calculation Result Browse Window.

Technologist Information :

Displays technologist name selected on the Mis-exposure Image Browse Window and the technologist's Total Count of Exposures, as well as the Total Count of Re-exposures, performed during the specified Period of Data Collection.

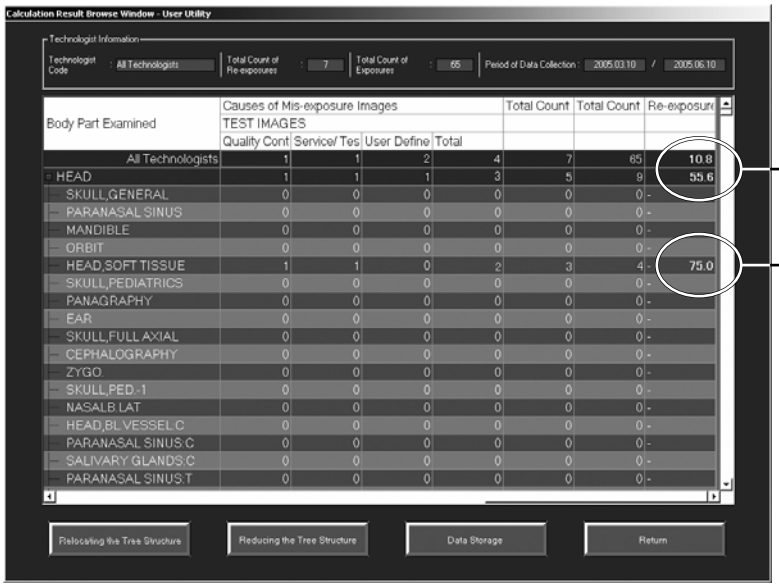
Causes of Mis-exposure Images :

Displays causes of mis-exposure images of the technologist selected on the Mis-exposure Image Browse Window individually for each exposure menu, calculating them into patient-derived, operation-derived and equipment-derived causes, together with other causes, if any.

Total Count of Re-exposures :

Displays the Total Count of Exposures and Total Count of Re-exposures, as well as the re-exposure ratio calculation result of the technologist selected on the Mis-exposure Image Browse Window, individually for each exposure menu.

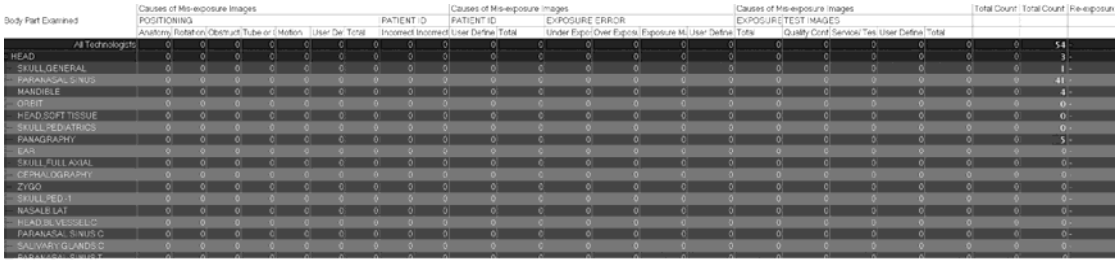
Displays the Total Count of Exposures and Total Count of Re-exposures, as well as the re-exposure ratio calculation result of the technologist selected on the Mis-exposure Image Browse Window, individually for each exposure menu.


Calculation Result Browse Window - User Utility
Technologist Information
Technologist Code : All Technologists
Total Count of Re-exposures : 7
Total Count of Exposures : 65
Period of Data Collection : 2005.03.10 / 2005.06.10
Body Part Examined
Causes of Mis-exposure Images
TEST IMAGES
Total Count
Total Count
Re-exposure
Quality Cont
Service/ Tes
User Define
Total
All Technologists 1 1 2 4 7 65 10.8
HEAD 1 1 1 3 5 9 55.6
SKULL,GENERAL 0 0 0 0 0 0 -
PARANASAL SINUS 0 0 0 0 0 0 -
MANDIBLE 0 0 0 0 0 0 -
ORBIT 0 0 0 0 0 0 -
HEAD,SOFT TISSUE 1 1 0 2 3 4 75.0
SKULL,PEDIATRICS 0 0 0 0 0 0 -
PANAGRAPHY 0 0 0 0 0 0 -
EAR 0 0 0 0 0 0 -
SKULL,FULL AXIAL 0 0 0 0 0 0 -
CEPHALOGRAPHY 0 0 0 0 0 0 -
ZYGO. 0 0 0 0 0 0 -
SKULL,PED.-1 0 0 0 0 0 0 -
NASALB LAT 0 0 0 0 0 0 -
HEAD,BL VESSEL C 0 0 0 0 0 0 -
PARANASAL SINUS C 0 0 0 0 0 0 -
SALIVARY GLANDS C 0 0 0 0 0 0 -
PARANASAL SINUS T 0 0 0 0 0 0 -
Relocating the Tree Structure
Reducing the Tree Structure
Data Storage
Return

Shown being emphasized in red boldface type figures.

(2) Displaying the reduced calculation result or relocating it to the full display

If you select “Reducing the Tree Structure”, the calculation result, such as for detailed exposure regions and causes of mis-exposures, is displayed being folded accordingly.
If you select “Relocating the Tree Structure”, calculation result data displayed being folded will be relocated to the full display, as shown below.

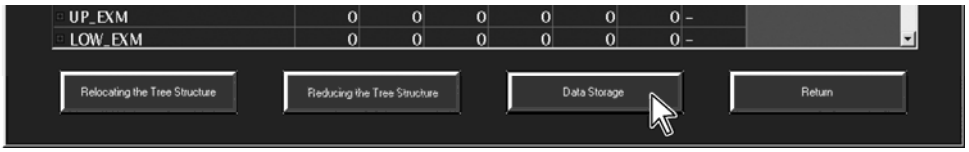


Reduction ↓ ↑ Relocation

Body Part Examined	Causes of Mis-exposure Images				Total Count	Total Count	Re-exposure
	POSITIC	PATIENT ID	EXPOSURE	TEST IMAG			
	Total	Total	Total	Total			
All Technologists	0	0	0	0	0	54	0.0
⊞ HEAD	0	0	0	0	0	3	0.0
⊞ NECK	0	0	0	0	0	1	0.0
⊞ CHEST	0	0	0	0	0	41	0.0
⊞ BREAST	0	0	0	0	0	4	0.0
⊞ ABDOMEN	0	0	0	0	0	0	-
⊞ PELVIS	0	0	0	0	0	0	-
⊞ UP_EXM	0	0	0	0	0	0	-
⊞ LOW_EXM	0	0	0	0	0	5	0.0
⊞ TEST	0	0	0	0	0	0	-
00	0	0	0	0	0	8	0.0
⊞ HEAD	0	0	0	0	0	1	0.0
⊞ NECK	0	0	0	0	0	0	-
⊞ CHEST	0	0	0	0	0	6	0.0
⊞ BREAST	0	0	0	0	0	0	-
⊞ ABDOMEN	0	0	0	0	0	0	-
⊞ PELVIS	0	0	0	0	0	0	-
⊞ UP_EXM	0	0	0	0	0	0	-
⊞ LOW_EXM	0	0	0	0	0	1	0.0

(3) Storing the calculation result

You can store the calculation result of Retake Analysis in a “.csv” format file, which can be placed at any location specified on the setup screen.
Select “Data Storage”.



A message appears prompting you to confirm a destination for data storage.
A message like that shown below appears if preparations have not been made properly for destination for data storage.

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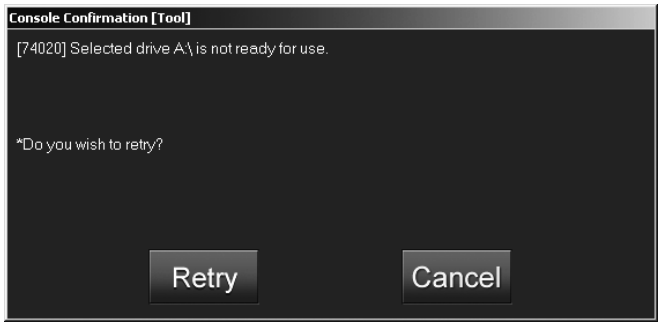
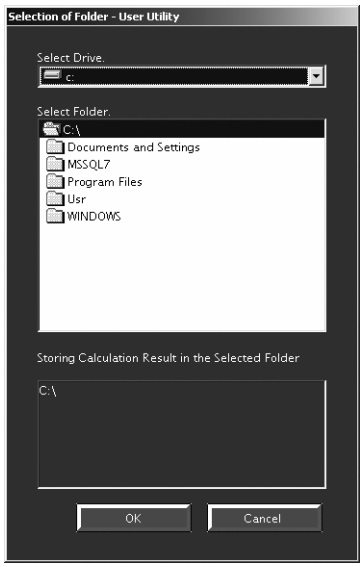
When “All Technologists” has been selected



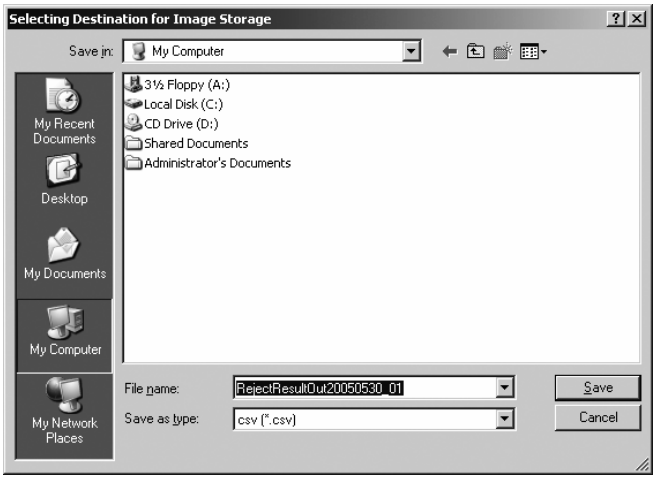
Make preparations necessary for destination for data storage, as determined on the Setup Window - User Utility, and then select “Retry”. The calculation result will then be stored appropriately in the destination determined on the Setup Window - User Utility.
If you select “Cancel”, a window opens prompting you to select a destination for data storage. Select a desired location and then store the calculation result in the selected location.



Specify a destination for data storage and then select “OK”. Mis-exposure image information will then be stored properly in the specified location.
If you select “Cancel”, storage of calculation data will be canceled and the Retake Analysis program returns to the Calculation Result Browse Window.

When “Each Technologist” has been selected

If you select “Cancel”, a window opens prompting you to specify a location where mis-exposure image information is to be stored.



(4) Returning to the Mis-exposure Image Browse Window

Select “Return” on the Calculation Result Browse Window.
The program will then return to the Mis-exposure Image Browse Window.

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